

NIKOLOVA, Nedka, inzh.; RADEV, Radi, inzh.

Rational utilization of water in the hydroelectric-power plants  
under the irrigation reservoirs. Elektroenergiia 13 no.10:  
14-18 O '62.

NIKOLOVA, N.

The Chemical Laboratory of the Institute for the Protection of Materials  
at Stara Zagora. Bldg 1 khim 4 no.5:45-98 '62.

DRAGOLOV, Stoian, uchitel (s. Elenovo); NIKOLOVA, Radka

A model for the manufacture of sulfuric acid. Biol i khim 4  
no.6:55-57 '62.

1. Institut za usuvrshenstvovane na uchitelite, St. Zagora.

NIKOLOVA, S.

AGRICULTURE

Periodical KOOPERATIVNO ZEMEDELIE. N<sub>o</sub>. 9, Sept. 1958

NIKOLOVA, S.: DIVITROV, A. : Confident in the future. p. 6.

Monthly List of East European Acquisitions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

NIKOLOVA, T.E.

Course of the period between attacks in rheumatism in children.  
Pediatris no.1:81 Ja-F '54. (MLRA 7:3)

1. Is Kazakhskogo nauchno-issledovatel'skogo instituta okhrany  
materinatva i detstva. (Rheumatism)

NIKULOVA, V.

Productivity of labor and the standard of living. p. 33.  
(Socijalna i gospodarska politika, Vol.10, No. 2/3, 1957, Beograd,  
Yugoslavia)

SO: Monthly List of East European Accessions (EEL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

NIKOLOVA, V.

Studies on the injurious soil entomofauna in Bulgaria.  
Izv Inst zashh rast 5:87-100 '63.

NIKLOVA, Veselina

Insects (Coleoptera, Carabidae) injurious and beneficial to  
rural economy. Priroda Bulg 12 no.3:80-83 My-Je '63.

KHACHANOV, Kh.; STOYKOV, S.; LIUTSKANOV, N. [Litotskanov, N.]; NIKOLIOVA, V.

Effect of certain factors on the gel-forming properties of  
sunflower pectin. Zhur. prikl. khim. 37 no.9:2035-2043 S '64.  
(MIRA 17:10)

1. Higher Institute of Food and Spice Industry, Plovdiv, Bulgaria.

NIKOLOVA, Veselina

Springtails (order Collembola, Apterygota) and their importance  
for rural economy. Priroda Bulg 12 no. 4: 98-100 Jl- Ag '63.

NIKOLOVA, Veselina

Soil insects, corn enemies in Bulgaria. Priroda Bulg 13 no.6:  
85-89 R-D '64.

BULGARIA/General and Special Zoology - Insects.

F-6

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21065

Author : Nikolova, Va

Inst :

Title : Insect Parasites on Larvae and Pupae of *Pyrausta purpuralis* L. and *P. sanguinalis* L. (Pyralidae) and *Cnephiasia nubilana* Hb (Tortricidae).

Orig Pub : Byul. rastit. zashchita, 1956, 5, No 1, 89-90

Abstract : Parasites infected 60% of the larvae of the *Pyrausta purpuralis* and *Pyrausta sanguinalis*. The parasites belonged to seven species: five species of braconides, one ichneumonid and one chalcid (*Catolaccus ater* Ratz.), which appeared as secondary parasite (*Limeria fuscicarpus*). *Itoptec-tis alternans* Gray was isolated from the *Cnephiasia nubilana* larvae.

Card 1/1

NIKOLOVA, V.; MINKOVA, S.; RADEV, R.

"Injurious wireworms of the family Elateridae (Coleopt.) in Bulgaria and experiments with chemicals in fighting them"

p. 233. (Izvestia) Vol. 7, no. 7, 1956. Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 5, May 1958

NIKOLOV, V.

BULGARIA/General and special Zoology. Insects 2-2

Abstr Jour : Rev Zool. - Biol., No 15, 1956, No 6637

Author : Nikolova, V., Mitev, T., Andov, R.  
Inst : Zoological Institute of the Bulgarian Acad. Sci.  
Title : Mar. Bul. Nirevans in Bulgaria and especially in  
the Use of Chemical substances ... against this..

Orig Pub : Izv. Zool. inst, Fil., etc, 1957, kn. 6, 265-273

Abstract : No Abstract

Card : 1/1

BULGARIA/General and Specialized Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40111

Author : Nikolova, V., Popova, V.

Inst :

Title : New Possibilities of Controlling the Cabbage Fly (*Hylomyia brassicae* B.)

Orig Pub : Byul. rastit. zashchita, 1957, 6, No 1, 29-32.

Abstract : No abstract.

Card 1/1

- 43 -

NIKOLOVA, V.

Some vegetable pests. p. 22.  
(Kooperativno Zemadelie, Vol. (12) no. 6, June 1957. Sofia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Unc1.

NIKOLOVA, V. (Sofia)

Some problems in fighting injurious insects and mites. Priroda Bulg 11  
no. 1:94-95 Ja-F 62.

1. TAMILZR.

NIKOLOVA, V.

Morphology of preimaginal stages of *Suillia (Helomyza) lurida* Meig.  
Izv Inst zasht rast 2:5-14 '62.

NIECIENKI, V.

162. Torture and other ill-treatment of the French press in  
Bulgaria, and their journalists. Izv Inst. nauchn. 3191-116  
162

SHINDAROV, L.; IVANOV, N.; MINDLOVA, Z.

Virusological considerations on the epidemic of influenza in  
Sofia in 1952-55. Savrem. med. Sofia 8 no.1:3-10 1957.

I. Is Republ. protivcepid. stantsiiia (Gl. lekar: L. Shindarov)  
I Meuchnitsa instituta po epidemiologii i mikrobiologii.  
(INFLUENZA, epidemiology,  
in Bulgaria, virol. aspects (Bul))

NIKOLOVA, Z.

SURNAME, Given Name

Country: Bulgaria

Academic Degrees: Dr

Affiliations: not given

Sources: Sofia, Khigiena, Vol IV, No 5, Sep/Oct 1961, pp 52-53

Data: "The International Congress on Virus and Rickettsia Diseases of the Respiratory Tracts."

670 98169

ANDONOV, P.; IVANOV, N.; RANGEOVA, St.; NIKOLOVA, Z.; RUSAKIEV, M.;  
GROMKOVA, R.

The use of serological investigations in studying the epidemiology of  
some virus infections in Bulgaria. J. hyg. epidem., Praha 5 no.2:  
146-152 '61.

I. Scientific Research Institute of Epidemiology and Microbiology, Sofia.  
(VIRUS DISEASES Immunology)

IVANOV, N.; JUKOLOVA, Z.; GROMKOVA, R.; ARAHADZHIEVA, TS. [Arabashieva, TS.]; MATEV, D.; RANGEOVA, S.

Dynamics of the titers of the antibodies of influenza amidst the population in Bulgaria, 1959-1960. Trudy epidemiol mikrobiol 6: 105-109 '61 [publ.'62].

IVANOV, N.; NIKOLOVA, Z.

Type B influenza epidemics in Bulgaria. J. hyg. epidem. 6 no.2:158-  
164 '62.

I. Institute of Epidemiology and Microbiology, Sofia.

(INFLUENZA epidemiology)

NIKOLOVA-DIMITROVA, Ye.A., doktor, starshiy nauchnyy etrudnik.

Progress of helminthology in Bulgaria. Veterinariia 32 no.10:  
86-89 O '55. (MERA 8:12)

1. Central'naya gel'mintologicheskaya laboratoriya Akademii  
nauk Belgarii.  
(BULGARIA--HELMINTHOLOGY)

NIKOLOVA-TROEVA, L. (Bulgaria)

Diagnostic significance of ultraviolet erythema in diseases of  
the central nervous system. Vop.kur.,fizioter.i lech.fis.ikal't.  
25 no.1847-48 '60. (NIMA 13:5)

1. Iz otdeleniya fizioterapii (zav. - L. Nikolova-Troeva) Vyshego  
meditsinskogo instituta v Sofii.  
(NERVOUS SYSTEM--DISEASES) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

NIKOLOVA-THORVA, L.

Treatment of acute and chronic pharyngitis with ultraviolet rays. Khirurgija (Sofia) 16 no.2:167-170 '63.

(PHARYNGITIS) (ULTRAVIOLET RAYS)

BULGARIA

VAKLINNOVA, S., MIKOLOVA-TSENOVA, E., ANCHELOVA, S., Institute of Plant Physiology, Bulgarian Academy of Sciences

"Effect of Ferredoxine on Hydroxylamine Photooxidation in Isolated Chloroplasts

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 19, No 12, 1966, pp 1191-1194

Abstract: [English article] Earlier investigations indicated (S. Vaklinova, Compt. rend. Acad. bulg. Sci., 17, 1964, No 3, 282) that hydroxylamine (HA) oxidizes to nitrite in a suspension of chloroplasts and their fragments under the influence of light. Recently, the role of protein containing iron in a nonchemical form and with a redox potential ( $E^{\circ} = -0.432$  V at pH 7.5) with 100 V more negative than the redox potential of pyridinenucleotide, in primary photosynthetic reactions has become known. L. P. Mortenson et al. (Biochem. Biophys. Res. Commun., 7, 1962, p. 448) gave the name of ferredoxin (Fd) to this protein. Its role in the primary processes of photosynthesis consists in the transfer of electrons released in the primary photochemical act of NADP. Proceeding from these data the authors studied the effect of this enzyme on the intensity of HA photooxidation. For that purpose ferredoxin was isolated from a homogenate of young spinach leaves by means of strongly cooled acetone. The article describes the actual photooxidation and the isolation of chloroplasts. A comprehensive  
1/2

NIKOLOVSKI S.

Rapid chemical test for soils and plants to establish need for artificial fertilisers.p. 37.

FOUND IN Vol. 8 No.1, Jan. 1956  
In Skopje, Yugoslavia

So. EAST EUROPEAN ACCESSIONS LIST Vol. 5, No. 7 July 1956

MANOVIĆ, R.; KRISOHO, D.; NIKOLOVSKI, S.

Proteinogram in pulmonary tuberculosis. Tuberkulose, Beogr. 11  
no. 4:525-530 0-B '62.

1. Institut za tuberkulozu UNM, Skopje, direktor: prof. dr. G.  
Maratovski; Interna klinika Med. fak. Skopje, upravnik: prof.  
dr. B. Arsov.

(TUBERCULOSIS PULMONARY blood)  
(BLOOD PROTEINS)

PETCOVSKI, Radovan; NIKOLOVSKI, Stevan; KOTEVSKI, Ljubomir; ANGOV,  
Dordi

Electrocardiogram in carcinoma. God.Zborn.Med.Fak.Skopje  
no.10:56-63 '63.

L 1367-66 EIT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(h) JD  
ACC-NRT AP6002426 SOURCE CODE: UR/0020/65/165/005/1065/1068

AUTHOR: Dmitriyev, V. D.; Ibragimov, Sh. Sh.; Nikol'shin, S. G.

ORG: none

TITLE: Effect of neutron radiation on recrystallization of uranium

SOURCE: AN SSSR. Doklady, v. 165, no. 5, 1965, 1065-1068

TOPIC TAGS: neutron irradiation, uranium, metal recrystallization, metal heat treatment

ABSTRACT: The recrystallization process was studied in natural uranium as a function of neutron irradiation. The specimens were 99.82% pure with a diameter of 12 mm and a length of 70 mm. The neutron intensity was  $2 \cdot 10^{13}$  neutrons per  $\text{cm}^2$ . The irradiated uranium rods were cut into sectors 4-5 mm thick. Recrystallization in these specimens was studied by microstructural and x-ray analysis and macrohardness measurements. Photomicrographs are given showing the structure of uranium specimens subjected to 50% deformation as a function of annealing temperature and holding time. Curves are given showing the hardness of deformed specimens as a function of

Card 1/2

UDC: 539.04

L 13867-66

ACC NR: AP6002426

annealing temperature before and after irradiation. Before irradiation, the specimens show a reduction in hardness at a temperature of about 500°. Irradiated uranium shows a slight reduction in hardness (by 20-30 kg/mm<sup>2</sup>) in the 450-500° region, and a considerable reduction (by 80-90 kg/mm<sup>2</sup>) at temperatures above 600°. The first reduction in hardness is apparently caused by annealing of radiation hardening defects, while the second is due to recrystallization of the deformed specimens. It is found that irradiation by neutrons raises the temperature and retards the process of recrystallization in deformed uranium. The effects of fission products and redistribution of defects during irradiation are considered. In conclusion the authors thank S. T. Konobeyevskiy for discussing the results of this work. (fig. art. ham: 4 figures, 1 table.

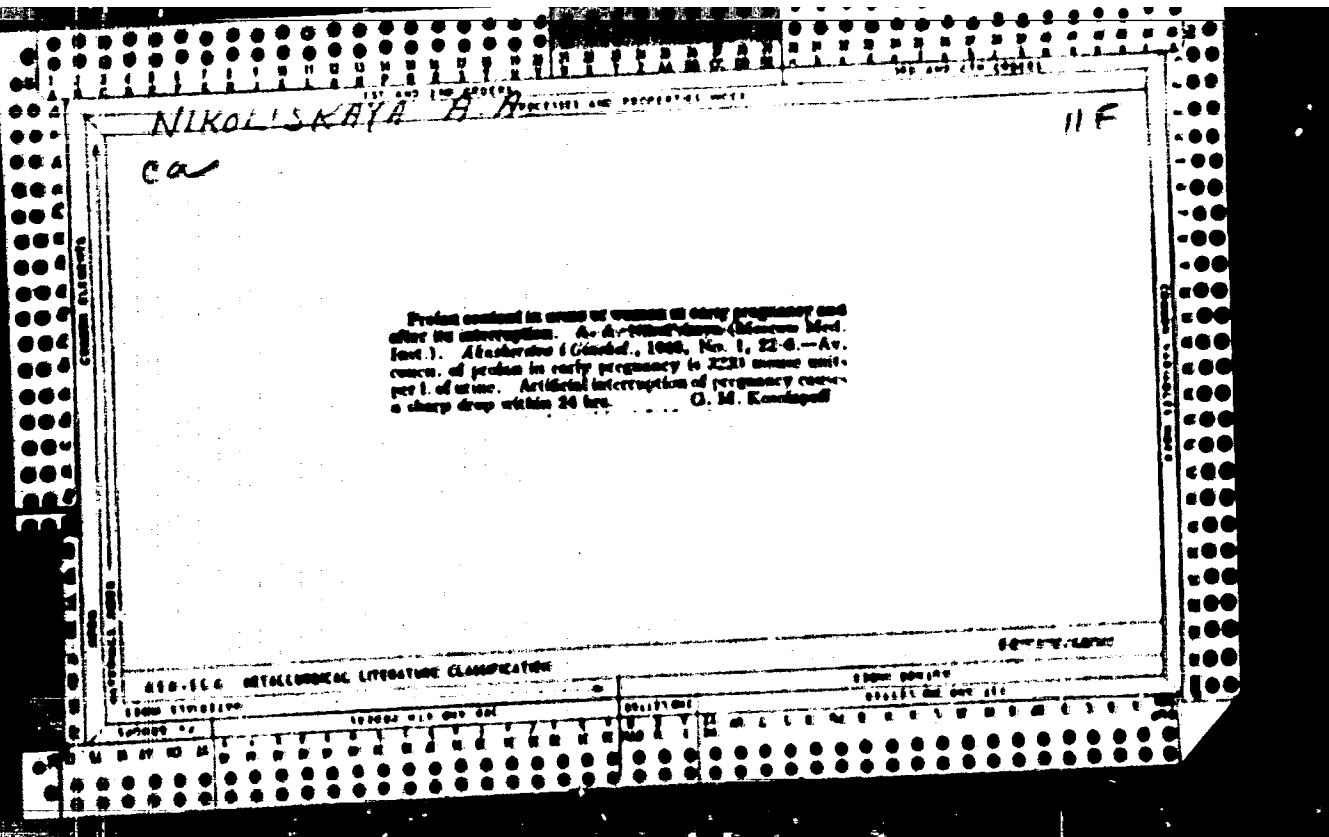
SUB CODE: 11/ SUBM DATE: 12Aug64/ ORIG REF: 003/ OTH REF: 001  
18/

Card 2/2 inc.

The preservation of pathological materials. A. A.  
Machado, Lab. Prod. (U. S. S. R.) 1989, No. 1,  
10-11.—The English must (30% diluted with physiolog-  
ical saline) was found to be a good preserving medium for  
feces under examn. for intestinal typhus bacteria.

W. R. Hens

10-11-4 METALLURICAL LITERATURE CLASSIFICATION



NIKOL'SKAYA, Antonina Aleksandrovna

Academic degree of Doctor of Medical Sciences, based on her defense, 15 June 1954, in the Council of the Central Inst for the Advanced Training of Physicians, of her dissertation entitled: "Allergic factor in the pathogenesis of eclampsia."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 17, 9 Jul 55, Byulleten' NVO SSR, No. 17, Sept 56, Moscow, pp 9-16, Uncl. JPRS/NY-435

NIKOL'SKAYA, A.A., kandidat meditsinskikh nauk.

Ganglionsuromat. Akush.i gin. no.1:71-72 Ja-P '54. (NIMA 7:6)

I. Is kafedry akusherstva i ginekologii (direktor - professor K.N.Zhukina)  
I. Moskovskogo ordena Lenina meditsinskogo instituta.  
(Sacromedycinal region--Tunere)

~~NIKOL'SKAYA, A.A.; DUNGAMA.~~

~~Late term extrauterine pregnancy. Sov.med. 21 Supplement:27-28  
'57. (MIRA 11:2)~~

~~1. Is kafedry akusherstva i ginekologii Mongol'skogo universiteta  
i men Chaybalsana i respublikanskogo rodil'nogo doma.  
(PREGNANCY, EXTRAUTERINE)~~

NIKOL'SKAYA, A.A.; NIKOLAYEVA, K.Ye.

Problems of premature birth as revealed by data from the Stavropol Maternity Home for 1957-1958. Vop. okh. mat. i det. 6 no.3:82-87 Mr '61. (MIRA 14:10)

1. Is kafedry akusherskogo i ginekologii Stavropol'skogo meditsinskogo instituta (zaveduyushchiy - prof. A.A.Nikol'skaya).  
(INFANTS (PREMATURE))

NIKOL'SKAYA, A.A., prof.

Postabortal amniotidie sepsis. Vop. okhr. mat. i det. 6 no.7:64-69  
JL '61. (MIR 14:8)

I. Is kafedry akusherskva i ginekologii (sav. - prof. A.A.Nikol'skaya)  
Stavropol'skogo meditsinskogo instituta.  
(ABORTION—COMPLICATIONS AND SEQUELAE)

NIKOL'SKAYA, A.A., prof.

Septicopyemia following a criminal abortion. Fel'd. i akush.  
28 no. 8832-35 Ag'63 (MIRA 16e12)

1. Iz kafedry akushersvta i ginekologii Stavropol'skogo na-  
ditsinskogo instituta.

NIKOL'SKAYA, A.A., prof.; SHAFIR, M.M., assistant

Atomic bleeding. Uch. zap. Stavr. gos. med. inst. 12:  
293-294 '63. (MIRA 17:9)

1. Nafodire akushetra i ginekologii (sav. prof. A.A. Nikol'skaya)  
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

NIKOL'SKAYA, A.A., prof.; KONOPKO, Ye.S., assistant

Course of pregnancy and labor in heart defects. Uch. zap.  
Stavr. gos. med. inst. 12:295-296 '63. (MIRA 17:?)

1. Kafedra akusherstva i ginekologii (sav. prof. A.A. Nikol'skaya)  
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

L 17104-61

EWP(q)/EWT(m)/BDS AFPTC/ASD JD

S/0032/63/029/007/0806/0006

ACCESSION #R: AP3004232 AUTHORS: Syavtsillo, S. V.; Nikol'skaya, A. N.; Vashko, T. Ye.

58

TITLE: Determination of nitrogen in boron and silicon nitrides

SOURCE: Zavodskaya laboratoriya, v. 20, no. 7, 1963

TOPIC TAGS: boron nitride, silicon nitride, nitrogen determination

ABSTRACT: A 0.03-0.15 gm aliquot of the nitride is placed in a porcelain combustion boat containing 2-3 gms powdered lithium hydroxide, with which the sample is covered. The boat is inserted in a porcelain tube. To one end of the tube are affixed two absorption wash bottles, each containing 20 ml of 2% boric acid, and to the other end an absorption wash bottle with 20 ml concentrated sulfuric acid. The oven is heated to 750-800°C in 15 minutes, and simultaneously air is passed through at a rate of 65-70 bubbles per minute. This carries with it the fumes of the formed ammonia and water vapors, which are absorbed by the boric acid solution. Within 30 minutes after the temperature has reached 800°C (when the evolution of ammonia has ceased) the solutions from the wash bottles with boric acid are transferred to an Erlenmeyer flask, and the excess boric acid is titrated back with a 0.1 normal solution of hydrochloric acid, with methyl orange as an indicator. The method was checked

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L 17104-63

ACCESSION NR: AP3004232

against that of Dumas and similar results were obtained. Due to foaming, it was not possible to substitute potassium hydroxide for lithium hydroxide.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: CH

NO REF SOW: 000

OTHER: 000

Card 2/2

The vapor pressure of ternary droplets systems. Equilibrium between solutions of potassium carbonate and magnesium oxide. A. V. Skaya (State Univ. Moscow). *J. Phys. Chem.* (U.S.S.R.) 50, 201-01 (1946).—The total vapor pressure  $P$  was determined with a Kofmanometer, and the compon. of the vapor phase by measuring the vapor (about 3 ml. of liquid) and measuring the d. of the distillate. From this compon. and  $P$ , the partial vapor pressures of  $\text{H}_2\text{O}$  and  $\text{KOH}$  were calculated. The wt. compon. ( $a_1$  and  $a_2$ ) of  $\text{KOH}$  in  $\text{H}_2\text{O}-\text{KOH}$  ratios, and their vapors are at 20° for  $P$  28.0 mm.  $\text{H}_2\text{O}$ ,  $a_1 = 19.18$ ,  $a_2 = 81.40$ ; for  $P$  40.5  $a_1 = 64.50$ ,  $a_2 = 35.50$ ; and for  $P$  50.0  $a_1 = 91.27$ . At 50°  $P$  is 154.5, 169.5, and 212.5 mm.  $\text{H}_2\text{O}$ , for  $a_1 = 21.21$ , 64.00, and 88.07, and  $a_2 = 68.98$ , 81.12, and 88.92%, resp. At 70°  $P$  is 430.0, 500.5, and 620.0 for  $a_1 = 12.76$ , 40.10, and 70.40, and  $a_2 = 89.27$ , 78.11, and 88.60%, resp. These results agree with the data by Dernov (C.A. 30, 5076).  $\text{KCO}_3$  ratios  $P$  and  $a_1$  at 20°, a soln. of  $\text{KCO}_3$  12.67,  $\text{KOH}$  14.49,  $\text{H}_2\text{O}$  84.24 wt. %, at 20° has  $P = 61$  and  $a_1 = 70.47\%$ , and a soln. of  $\text{KCO}_3$  10.19,  $\text{KOH}$  14.04,  $\text{H}_2\text{O}$  85.75 wt. % at 20° has  $P = 100$  and  $a_1 = 78.57\%$ . At higher  $\text{KOH}$  compon.,  $\text{KCO}_3$  comes out of solution. The vapors of the 3 layers is given for several systems at 20°, 50°, and 70°. In the 3-phase systems,  $P$  and the partial pressure ( $\sigma$ ) of  $\text{KOH}$  pass through max. at a medium concn. of  $\text{KOH}$  and a medium concn. of  $\text{KCO}_3$ .  $\text{KCO}_3$  at 50°  $P$  and  $\sigma$  are max. (191.6 and 118.4 mm.) at 51.17% of  $\text{KOH}$  in the upper and 18.75% of  $\text{KOH}$  in the lower layer.

$\text{MgO}$  increases  $P$  (e. g., 178 at 50° for a soln. of  $\text{MgO}$  14.20,  $\text{KOH}$  18.83, and  $\text{H}_2\text{O}$  81.73%). Solving out of  $\text{KOH}$  by  $\text{MgO}$  is done at 50° and 70°.  $\text{MgO}$  affects  $P$  and  $\sigma$  less than does  $\text{KCO}_3$ . J. J. Oberman

AB-3A METALLURGICAL LITERATURE CLASSIFICATION

LEADERSHIP INFORMATION

14000 00012  
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NIKOL'SKAYA, A. V.  
USSR/Chemistry

Card 1/1

Authors : Nikol'skaya, A. V., and Gerasimov, Ya. I.

Title : Study of the Thermodynamic Characteristics of Bi-Metallic Systems by Means of an Electromotive Force. Cadmium - Bismutite System.

Periodical : Zhur. Fiz. Khim. Vol. 28, Ed. 4, 713-728, Apr 1954

Abstract : Study of the characteristics of liquid metal smeltings (Cd-Bi) by means of an electromagnetic force. The studies are performed by concentration of 10-90% of the atoms of cadmium in a temperature interval of 400 to 600°. Eighteen references; tables; graphs.

Institution : M. V. Lomonosov's Moscow State Institute.

Submitted : July 25, 1953

137-58-4-6581D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 37 (USSR)

AUTHOR: Nikol'skaya, A. V.

TITLE: A Study of the Thermodynamic Properties of the Metallic Melts Cd-Bi, Cd-Cu, Cu-Sb, and Cu-Bi by the Electromotive-force Method (Izuchenie termodinamicheskikh svoystv metallicheskikh rasplavov Cd-Bi, Cd-Cu, Cu-Sb i Cu-Bi metodom elektrosvizhushchikh sil)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Chemical Sciences, presented to the MGU (Moscow State University), 1957

ASSOCIATION: MGU (Moscow State University), Moscow

1. Metallic melts--Thermodynamic properties

Card 1/1

NIKOL'SKAYA, P.V.  
SSSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,  
Physical-Chemical Analysis, Phase Transitions.

B-8

Abs Jour: Referat. Zhurnal Khimii, No 3, 1958, 7118.

Author : A.V. Nikol'skaya, P.P. Otopkov, Ya. I. Gerasimov,  
Inst :

Title : Study of Thermodynamic Properties of Binary Metallic Systems  
by E.M.F. Method. II. System Cadmium - Copper.

Orig Pub: Zh. fiz. khimii, 1957, 31, No 5, 1007-1012.

Abstract: The system Cd - Co was investigated by the e.m.f. method  
(report I, RZhKhim, 1955, 23245). The electromotive forces  
of concentration chains Cd/CdCl<sub>2</sub>/(Cd<sub>x</sub>Cu<sub>1-x</sub>)<sup>+</sup> of 20 liquid  
alloys of various composition in the range from 0.948 to  
0.460 atomic parts of Cd(N<sub>Cd</sub>) were measured from 575 to 650°,  
the results having been reproducible with ± 0.1 v. The values  
of the logarithm of the activity factor Cd(log /C<sub>d</sub>) were com-  
puted from the e.m.f. and N<sub>Cd</sub>. The partial heats (T<sub>Cd</sub>) and the

Card : 1/2

-4-

5(4)  
AUTHORS:

Nikol'skaya, A. V., Lomov, A. L., Gerasimov, Ya. I. (Moscow)

SOV/76-33-5-27/33

TITLE:

The Investigation of the Thermodynamic Properties of Binary Metallic Systems According to the Method of Electromotoric Forces (Issledovaniye termodynamicheskikh svoystv dvoynykh metallicheskikh sistem metodom elektrodvizhushchikh sil).  
5.The System Copper - Bismuth (5. Sistema med' - vismut)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 5,  
pp 1134 - 1139 (USSR)

ABSTRACT:

The concentration chains  $\text{Cu}_{\text{solid}} \mid \text{CuCl}, \text{NaCl} - \text{KCl} \mid (\text{Cu}_{\frac{N}{N+1-N}} \text{Bi}_{1-N})^+$  liquid ( $N$  - molar copper content of the melt) were investigated. The investigation was carried out in a temperature interval of from  $1150 - 1225^\circ\text{K}$  at a concentration  $\text{N}_{\text{Cu}} = 0.063 - 0.710$ . The values for the emf were plotted as  $f(T)$  for each concentration, and a linear dependence was found. The values for  $1150$ ,  $1175$ ,  $1200$ , and  $1225^\circ\text{K}$  were found by interpolation. Table 1 shows these values. The activity of copper with regard to solid and to liquid undercooled

Card 1/3

The Investigation of the Thermodynamic Properties  
of Binary Metallic Systems According to the Method of Electromotoric  
Forces. 5. The System Copper - Bismuth

SOV/76-33-5-27/33

copper was calculated from the values for the emf. The values for the logarithm of the activity coefficient of copper ( $\lg \gamma_{Cu}$ ), the partial heats, and the surplus entropies of the mixing of copper are also shown in table 1. Table 2 shows the corresponding values for bismuth. The values for electrodes with a copper content  $x > 0.701$  were found by extrapolation. Figures 1 and 2 show graphical description of the partial and integral heats and the mixing entropies. The system Cu-Bi differs considerably from Raoult's law. The differences decrease with rising temperature. The Cu-Bi melts are formed under heat absorption, the mixing heats being considerably high. With equiatomic composition their maximum is 1600 kcal/g-atm. The considerable positive differences of the entropy from the ideal values are characteristic of Cu - Bi melts. This fact is explained by the great difference of the atomic volumes of the two components. The retarded change of the mixing heat and the mixing entropies in the range of from 0.3 - 0.7  $x_{Cu}$  is indicated. Hence

Card 2/3

The Investigation of the Thermodynamic Properties                    SOV/76-33-5-27/33  
of Binary Metallic Systems According to the Method of Electromotoric  
Forces. 5. The System Copper - Bismuth

it is concluded that the Cu - Bi melts have a microheterogeneous structure. There are 3 figures, 2 tables, and 12 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 11, 1957

Card 3/3

5(4)

AUTHORS: Nikol'skaya, A.V., Geyderikh, V.A., S/020/60/130/05/053/051  
Gerasimov, Ya.I., Corresponding Member, AS USSR

B004/B014

TITLE: The Thermodynamic Properties of Indium Antimonide<sup>1</sup>

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 5, pp 1074-1077  
(USSR)

ABSTRACT: In figure 1 the authors show the phase diagram of the In - Sb system and give a complete list of publications dealing with the thermodynamic properties of InSb. This paper is intended to calculate the thermodynamic properties of InSb on the basis of experimental data obtained by means of the electrochemical chain In(liquid) | (KCl-LiCl) + InCl | (InSb + Sb)(solid). The change  $\Delta Z$  of the isobaric-isothermal potential is, as a result of the reaction In(liquid) + Sb(solid) = InSb(solid), proportional to the emf of the cell. Thus, the investigation of the temperature dependence of the emf also disclosed the temperature dependence of  $\Delta Z$ . This investigation was therefore carried out in the heterogeneous region of the InSb - Sb system between 390° and 490° using alloys with an antimony content of 59.9%.

Card 1/2

8/020/61/137/006/016/020  
B101/B201

AUTHORS: Geyderikh, V. A., Gerasimov, Ya. I., Corresponding Member  
AS USSR, and Nikol'skaya, A. V.

TITLE: Thermodynamic properties of alloys of the iron - tellurium  
system in the solid state

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 6, 1961, 1399-1401

TEXT: A study has been made of solid Fe-Te alloys by measuring the emf E of  
the chain (-)Fe|FeCl<sub>2</sub>(KCl + LiCl)|Fe - Te (+) (1). 21 alloys in the phase  
melt solid alloy

region  $\beta + \text{Te}$ ,  $\beta$ ,  $\beta + \gamma$ ,  $\gamma$ ,  $\gamma + \alpha$ , and  $\beta + \alpha$ , have been examined at  
360-650°C. Alloy production and methods are described in Ref. 1 (DAN, 130,  
1074, (1960)). The linear equations  $E = A + BT$  (Table 1) have been calculat-  
ed by the method of the least squares. The calculated course of the  
thermodynamic functions is shown in Fig. 2. Results: 1) The formation  
entropies from the elements of  $\alpha$ - and  $\gamma$ -phase are positive. 2) The  $\beta$ -phase  
arises with diminution of entropy. 3) The formation enthalpies, while having  
a course parallel to the entropies, remain negative in the whole concentra-  
Card 1/4

8/020/61/157/006/016/020  
B101/B201

Thermodynamic properties of alloys ...

tion range. 4) A similar course has also been found in the Fe - Sb system. The relationship is explained by the fact that the  $\beta$ -phase of the Fe - Te system inclusive of  $FeTe_2$  has a marcasite structure like  $FeSb_2$ . The  $\gamma$ -phase of the Fe - Te system and the  $\epsilon$ -phase of the Fe - Sb system are berthollide phases with defective structure of the type of nickel arsenide. Their range of existence no longer comprises the composition 1 : 1. 5) In accordance with the authors' view concerning the effect of lattice defects in NiAs upon the formation entropy of the intermetallic phase, the range of existence of the  $\gamma$ -phase of the Fe - Te system is more distant from the 1 : 1 composition than the  $\epsilon$ -phase of the Fe - Sb system. 6) In all Fe - Te alloys with the composition  $N_{Fe} = 0.35-0.51$  a break appears in the  $E(T)$  function at about 513°C, which confirms the eutectic decomposition of the  $\gamma$ -phase into  $\alpha$ - and  $\beta$ -phase. Fig. 1 presents the phase diagram of the Fe - Te system according to S. Chiba (Ref. 5, see below). The denotations for the phases are taken from S. Chiba. The authors' results are dash-lined. There are 2 figures, 2 tables, and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The 2 references to English-language publications read as follows: S. Chiba, J. Phys. Soc., Japan, 10, 857, (1955); M. Hansen, K. Anderko, Constitution of

Card 2/4

Thermodynamic properties of alloys ...

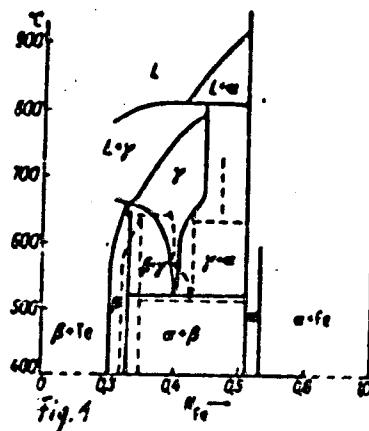
6/020/61/157/006/016/020  
3101/B201

Binary Alloys, 1958

SUBMITTED: January 10, 1961

Fig. 1. Constitution diagram of the  
Fe - Te system.

Legend: Continuous lines: data  
by S. Chiba; dashed lines:  
authors' data.



Card 3/4

39437  
5/081/62/000/012/008/063  
B168/B101

5.4700

AUTHORS:

Gerasimov, Ya. I., Nikel'skaya, A. V.

TITLE:

Thermodynamic properties of tellurides of bismuth ( $\text{Bi}_2\text{Te}_3$ )  
and antimony ( $\text{Sb}_2\text{Te}_3$ )

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 50. abstract  
12B349 (Sb. "Vopr. metallurgii i fiz. poluprovodnikov", M.,  
AN SSSR, 1961, 30 - 33)

TEXT: The emf's of a galvanic cell  $M(\text{Sb}, \text{Bi})/(\text{KCl} + \text{LiCl})$  fusion +  $\text{BiCl}_3$ ,  
 $\text{SbCl}_3/(\text{M}_2\text{Te}_3 + \text{Te})^+$  were measured within the temperature range 370 - 420°C.  
The isobaric potentials at 400°C, enthalpies and entropies of formation  
for  $\text{Bi}_2\text{Te}_3$  (Bi (liq.), Te (sd.)) were found by calculation to be  
 $\Delta Z = -3.76 \pm 0.1 \text{ kcal/g-atom}$ ,  $\Delta H = -4.88 \pm 0.2 \text{ kcal/g-atom}$ ,  
 $\Delta S = -1.67 \text{ cal/g-atom}\cdot\text{deg}$ .  $\text{Sb}_2\text{Te}_3$  (Sb (sd.), Te (sd.))  
 $\Delta Z = -2.95 \pm 0.1 \text{ kcal/g-atom}$ ,  $\Delta H = -2.86 \pm 0.5 \text{ kcal/g-atom}$ ,  
 $\Delta S = +0.14 \text{ cal/g-atom}\cdot\text{deg}$ . There is a large error in the value given for

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S/081/62/000/012/008/063  
B168/B101

Thermodynamic properties of...

the entropy of formation of  $Sb_2Te_3$ , owing to the low temperature coefficient  
of the entf. [Abstracter's note: Complete translation]

Card 2/2

S/843/62/000/000/009/010  
u207/D302

AUTHORS:

Gerasimov, Ya.I., Nikol'skaya, A.V. and Yevseyev,  
...I..

TITLE:

Thermodynamic properties of liquid metal alloys

SOURCE:

Stroyeniye i fizicheskiye svoystva veshchestva v  
zhidkem sostoyanii; materialy IV soveshch. po probl.  
zhidkogo sost. veshchestva, v Kiyev'e 1959 g. Kiev.  
Izd-vo Kiev. univ., 1962, 115-118

TEXT: Knowledge of the thermodynamic properties of metal  
solutions is very valuable in the general theory of solutions. The  
present paper reports a study of the thermodynamic properties of  
the liquid alloys of copper with cadmium, antimony or bismuth, of  
bismuth with cadmium, and of lead with tin. The copper and bismuth  
alloys were investigated by the emf method, the lead-tin alloys were  
studied using the pressure of lead vapor measured by the effusion  
method. The work was carried out at 400-900°C. The experimental  
results were used to calculate the activity coefficients of the com-

Card 1/2

8/020/62/147/004/016/027  
B107/B186

AUTHORS: Gerasimov, Ya. I., Corresponding Member AS USSR,  
Abbasov, A. S., Nikol'skaya, A. V.

TITLE: Thermodynamic properties of indium tellurides

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 4, 1962, 835-838

TEXT: The thermodynamic properties of  $\text{In}_2\text{Te}_5$ ,  $\text{In}_2\text{Te}_3$ ,  $\text{InTe}$ , and  $\text{In}_2\text{Te}$  were determined between 380 and 425°C from the e.m.f. of concentration chains. A eutectic LiCl - KCl mixture was used as electrolyte. The  $\text{In}_2\text{Te}_5$  - Te chain was studied between 300 and 420°C, and a mixture containing 18, 12, and 70% by weight of KCl, NaCl, and  $\text{ZnCl}_2$ , respectively, was used as electrolyte. The studies were conducted in an argon atmosphere or in vacuo. The results may be expressed by  $E = A + B \cdot T$ .  
 $E = 0.3350 + 0.176 \cdot 10^{-3} T$  for  $\text{In}_2\text{Te}_5$  - Te;  $E = 0.2327 + 0.102 \cdot 10^{-3} T \pm 0.008$  for  $\text{In}_2\text{Te}_5$  -  $\text{In}_2\text{Te}_3$ ;  $E = 0.1182 + 0.248 \cdot 10^{-3} T \pm 0.007$  for

Card 1/5

Thermodynamic properties of ...

S/020/62/147/004/016/027  
B107/B186

Table 2, Thermodynamic data for indium tellurides. Legend: (1) phase; (2) -  $\Delta G_{6730K}$ , in kcal; (3) -  $\Delta H$ , in kcal; (4)  $\Delta S$ , entropy units (for 1 mole); (5) -  $\Delta G_{6730K}$ , in kcal,  $\Delta H$ , in kcal; (6)  $\Delta S$ , entropy units (for 1 atom).

(1) (2) (3) (4) (5) (6)

In <sub>2</sub> Te <sub>3</sub>	20.8 ± 0.5	15.4 ± 3.0	+8.0 ± 2.0	3.0	2.2	+1.1
In <sub>2</sub> Te <sub>3</sub>	18.0 ± 0.3	13.5 ± 3.2	+6.7 ± 2.0	3.6	2.7	+1.3
InTe	8.2 ± 0.2	5.4 ± 1.8	+4.0 ± 1.0	4.1	2.7	+2.0
In <sub>2</sub> Te	0.4 ± 0.3	11.3 ± 2.0	-3.0 ± 1.3	3.1	2.8	-1.0

Card 3/3.

NIKOL'KAYA, A.V.

Celebration in honor of IAkcv Ivanovich Gerasimov; 1903 - . Vest.  
Mosk.un. Ser.2:Khim. 18 no.6:77-78 N-D '63. (MERA 17:4)

8/0020/64/156/002/0118/0120

ACCESSION NR: A4035815

AUTHOR: Abbasov, A. S.; Nikol'skaya, A. V.; Gerasimov, Ya. I. (Corresponding member); Vasil'yev, V. P.

TITLE: Determination of the thermodynamic properties of indium arsenide from the electromotive force measurements

SOURCE: AN SSSR. Doklady\*, v. 156, no. 1, 1964, 118-120

TOPIC TATE: electromotive force, indium arsenide, thermodynamic property, entropy, enthalpy, Gibbs free energy, thermodynamic function

ABSTRACT: Indium arsenide belongs to a group of compounds of the  $A^{III}B^V$  type. This group of semiconductors is now the subject of extensive investigations. The purpose of this work was to study the basic thermodynamic properties of InAs. This investigation of thermodynamic properties of InAs was based on the measurement of emf of the following cell

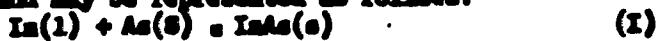
(-)In(1)/chloride melt + InCl/(InAs As)(s)(+)

These investigations were carried out in the 200 - 510 °C temperature interval. On the basis of a phase diagram of In-As it was concluded that electrodes of

Card 1/3

ACCESSION NR: AP4035815

arsenic-arsenide type, regardless of the excess amount of As, are in the two-phase region. Thus, the  $\text{emf}$  of such cells corresponds to the formation of arsenide from the components, and may be represented as follows:



Directly from  $\text{emf}$  measurements the authors calculated the change of Gibbs free energy ( $\Delta G^\circ$ ) for reaction (I)

$$\Delta G = -nFE$$

where  $n$  is the charge on metal ion, (val for In),  $F$  is the Faraday's constant equal to 23062 cal/v·g-equiv., and  $E$  is the  $\text{emf}$  in volts. The change of entropy and enthalpy of this process was calculated from the measurements of  $\text{emf}$  as a function of temperature

$$\Delta S = -\frac{\partial(\Delta G)}{\partial T} = nF \frac{\partial E}{\partial T}$$

$$\Delta H = \Delta G + T\Delta S$$

"The authors express their gratitude to L. Ya. Krol' and N. D. Khlystovskaya of the Institute of Rare Elements (Institut redkikh elementov) for the preparation of the indium arsenide." Orig. art. has: 1 table and 1 figure.

ASSOCIATION: Moscowvskiy gosudarstvennyy universitet im. M. V. Lomonosova

Card

2/3

ACCESSION NR: AP4035815

(Moscow State University)

SEARCHED: 17Jan86

ENCL: 00

SUB CODE: 00, 10

ORIGIN: 006

NO NEW Sov: 008

Card

3/3

ACCESSION NR: AP4040753

S/0020/64/156/009/1140/1142

AUTHOR: Abbasov, A. G.; Nihal'shaya, A. V.; Vasil'yev, V. P.; Gerasimov, Ya. I.  
(corresponding member, AN SSSR)

TITLE: Analysis of the thermodynamic properties of gallium tellurides by electro-  
notive force method

SOURCE: AN SSSR. Doklady, v. 156, no. 5, 1964, 1140-1142

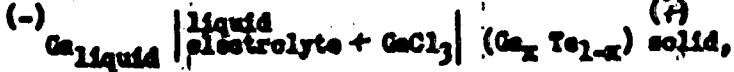
TOPIC TAGS: emf, gallium, gallium telluride, gallium telluride compound, Te,  
gallium mono-telluride, gallium sesquitelluride, semiconductor, gallium tri-  
chloride

ABSTRACT: The phase diagram of the system gallium-tellurium given in Hansen and  
and Anderson's monograph (Strukturna dvoynerich splivov, Moscow, 1962, page 606)  
points out the existence of compounds of  $Ga_2Te_3$  and  $Ga_3Te$  compositions without  
homogeneity intervals. They also noted that the structure of a region rich in  
tellurium was not fully explained. They assumed that a telluride of the composi-  
tion  $Ga_2Te_3$  was formed in it. The purpose of the present paper was an analysis of  
the thermodynamic properties of gallium tellurides. The authors used the emf  
method in their analysis. The methodology of this method was described previously  
by A. V. Nihal'shaya et al. (DAN, 130, No. 5, (1960, 1074) and by Ya. I. Gerasimov

Cord 1/3

ACCESSION NR: AP4040953

and A. V. Nikol'simaya (Voprosy metallurgii i fiziki poluprovodnikov, Izd. AN SSSR, 1961, page 30). Concentration electrochemical chains of the type



where  $x$  is the gallium mole fraction,  $r$  re studied. The phases were identified by X-ray analysis for the stoichiometric compositions as well as for transition alloys. The parameters which were found are in satisfactory agreement with those found in literature:  $a=5.89$  angstrom for  $\text{Ga}_2\text{Te}_3$ ,  $a=23.79$  angstrom for  $\text{Ga Te}$ ,  $b=4.08$  angstrom,  $c=10.49$  angstrom, and  $\theta=45.70^\circ$ . Alloys with compositions of 53.2 - 84.2 at .% of Te were analyzed. Findings showed that all alloys with compositions of 63.5 to 84.2 at .% of Te yielded a constant emf value within an experimental error of  $\pm 11.0$  millivolts. This indicates that the examined alloys lie in one and the same phase space. Alloys with 53.2 to 55.7 at .% of Te also yielded constant values, which corresponds to the formation of the  $\text{Ga Te}$  phase from  $\text{Ga}_2\text{Te}_3$  and gallium. Equations of the form  $E=A+B/T$  were found for the relationship between emf and absolute temperature as, the result of processing the experimental data by the least square method. The errors in the emf magnitudes and smoothing coefficients A and B, which determine the precision for calculation of temperatures and entropies, were calculated with equations of the least squares technique. Findings

Card 2/3

ACCESSION NR: AF4040953

are generalized in a table. Orig. art. has: 1 figure, 2 tables and 3 equations.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University)

SUBMITTED: 22 Feb 64

EXCL: 00

SUB CODES: 00, 00

"

SO REF Sov: 008

OTHER: 008

Card 3/3

ACCESSION NR: AP4041405

8/0020/64/156/006/1399/1401

AUTHOR: Abbasov, A. S.; Nikol'skaya, A. V.; Vasil'yev, V. P.; Germanov, Ye. I. (Corresponding member AN SSSR)

TITLE: Investigation of the thermodynamic properties of gallium antimonide by the electromotive force method

SOURCE: AN SSSR. Doklady\*, v. 156, no. 6, 1964, 1399-1401

TOPIC TAGS: gallium antimonide, thermodynamic property, electro-motive force, isobaric isothermal potential, entropy, enthalpy

ABSTRACT: The thermodynamic properties of GaSb were calculated from the e.m.f. of the cell  $\text{Ga}_{\text{liq}} \mid (\text{KCl}-\text{LiCl})_{\text{melt}} + \text{GaO}_3 \mid (\text{GaSb} + \text{Sb})_{\text{solid}}$

in the 360-5600 temperature interval wherein the e.m.f. of the reaction of liquid Ga and solid Sb to form solid GaSb was measured (fig. 1). The isobaric-isothermal potential, entropy and enthalpy were calculated for the given temperature range and for standard temperature from  $E = 161.1 - 0.095T$  mv:

-  $\Delta G = 3.2 \pm 0.3$ , -  $\Delta G^\circ = 4.5 \pm 0.3$  kcal/gm.atom;  
-  $\Delta S = 3.3 \pm 0.7$ , -  $\Delta S^\circ = 0.7 \pm 0.7$  electron ergs/gm. atom;

-  $\Delta H = 5.6 \pm 0.5$ , -  $\Delta H^\circ = 4.7 \pm 0.5$  kcal/gm.atom.

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ACCESSION NR: AP4041405

The thermodynamic functions for the formation of GaSb from monatomic gas molecules were also calculated;  $\Delta H_{298} = 68.5$  kcal/gm.atom;  
 $\Delta S_{298} = 32.1$  electron ergs/gm.atom;  $\Delta G_{298} = 59.0$  kcal/gm. atom.

Orig. art. has: 2 tables and 1 figure

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.  
Lomonosova (Moscow State University)

SUMMITTED: 22Feb64

ENCL: 01

SUB CODE: TD,IC

MR REF Sov: 007

OTHER: 006

Cord 2/3

ACCESSION NO: 4041405

ENCLOSURE: 01

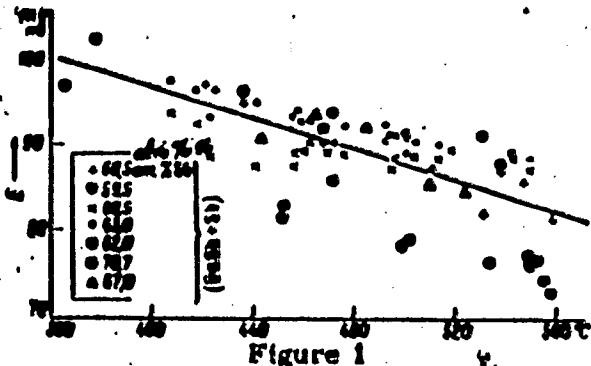


Figure 1

Dependence of electromotive force on the temperature in the cell  
 $\text{Ga}_{\text{lq}} | (\text{KCl} - \text{LiCl})_{\text{melt}} + \text{GaCl}_3 | (\text{GaSb} + \text{Sb})_{\text{solid}}$

Card 3/3

ACC NR: AP6034757

SOURCE CODE: UR/0020/66/170/005/1110/1112

AUTHOR: Abbasov, A. S.; Mamedov, K. N.; Nikol'skaya, A. V.; Gerasimov, Ya. I.  
(Corresponding member AN SSSR); Vasil'yev, V. P.

ORG: Physics Institute, Academy of Sciences AzerbSSR (Institut fiziki Akademii nauk  
AzerbSSR); Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy  
universitet)

TITLE: Thermodynamic properties of gallium arsenide investigated by the electro-  
motive force procedure

SOURCE: AN SSSR. Doklady, v. 170, no. 5, 1966, 1110-1112

TOPIC TAGS: gallium arsenide, thermodynamic property, emf, electric conductivity, ~~semiconductor device, quantum generator~~

ABSTRACT: Since GaAs is important as the active ingredient in semiconductor injection  
quantum generators, which convert electric current directly into high-efficiency co-  
herent radiation, its basic thermodynamic properties were studied. A procedure is  
described for measuring electric conductivity through GaAs electrodes in an electro-  
lyte of LiCl + KCl with 0.1% of GaCl<sub>3</sub> added, at temperatures ranging from 637 to 741°C.  
The 99.99% pure components were pressed in 6 x 3mm tablets with tungsten wire contacts  
protruding. Electric conductivity and electrolyte temperatures were both registered  
by PPTV-1 potentiometers as the temperature rose and again as it declined in all test  
series, the relation being plotted on a graph. All test findings were processed by  
Card 1/2

UDC: 541.1.11.115

ACC NR: AP6034757

the method of least squares and expressed by a formula for comparison with a similar formula evolved in tests with an electrolyte  $ZnCl_2 + KCl + NaCl$ , which however, proved more subject to error than the  $LiCl + KCl$ . Standard thermodynamic properties were also worked out for 298C and with findings by other scientists. The authors are grateful to L. Ya. Krol' and L. P. Aleksandrova for providing gallium arsenide specimens. Orig. art. has: 6 formulas, 1 table, and 1 figure.

SUB CODE: 11/ SUMM DATE: 18Feb66/ ORIG REF: 006/ OTH REF: 012  
09/

Card 2/2

BAKANOV, A.T.; KATZBERG, B.A.

Descent of satellites on an elliptic orbit. Izv.vys.ucheb.zav.;  
av.tekh. no.4:3-8 '58. (NIREA 11:12)

1. Leningradskiy voenno-mekhanicheskiy institut, kafedra  
aerogazodinamiki.  
(Artificial satellites)

GERASIMENKO, I.I.; LIBIZOV, N.I.; NIKOL'SKAYA, B.S.; SATSYPEROV, F.A.  
[deceased]; ITSKOV, N.Ya., ~~кандидат медицинских наук~~ (candidate of medical sciences),  
redaktor; Turova, A.D., doktor meditsinskikh nauk, redaktor;  
ZHUKOV, G.I., redaktor; BUL'CHIKOVA, Yu.S., tekhnicheskij redaktor

[Indian datura (D. innoxia Mill) Durman indejskii. Pod red. N.IA.  
Itskova i A.D.Turovoi. Moskva, Gos. izd-vo med. lit-ry, 1953. 77 p.  
(Microfilm)  
(Datura)]

NIKOL'SKAYA, B.S.  
BURNISTROV, P.V.; LIBIZOV, N.I.; MTRAV'Yeva, V.I.; NIKOL'SKAYA, B.S.;  
ITSKOV, N.Ya., kandidat sel'skokhozyaystvennykh nauk, redaktor;  
Turova, A.D., doktor meditsinskikh nauk, redaktor; ZHUKOV, G.I.,  
redaktor; BUL'CHINOVA, Yu.S., tekhnicheskiy redaktor

[Himalyan scopolia] Skopolija ginalaiskaja. Pod red. N.Ia. Itskova  
(A.D.Turovoi). Moskva, Gos. izd-vo med. lit-ry, 1953. 86 p.  
[Microfilm]  
(Scopolia)

NIKOL'SKAYA, B.S.  
TUR'VA, A.D.; CHUKICHINA, M.N.; NIKOL'SKAYA, B.S.

[Medicines of plant origin; a pharmacological and clinical study of medicinal plants] Lekarstvennye sredstva pastitel'nogo prirodnego  
prichesleniya; farmakologicheskoe i klinicheskoe issuchenie lekarstvennykh  
rastenii. Moscow, Medgiz, 1954. 174 p.  
(Pharmacology) (Botany, Medical)

(MLA 8:2)

NIKOL'SKAYA, B.S.

TUROVA, A.D.; NIKOL'SKAYA, B.S.

Brief survey of medicinal flora of Moscow Province (Oka region).  
Farm. i toka, 17 no.1:54-58 Ja-V '54. (MLRA 7:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i  
aromaticeskikh rastenij.  
(Moscow Province--Botany, Medical--Moscow  
Province)

NIKOL'SKAYA IS. S.

TUROVA, A.D.; NIKOL'SKAYA, E.I.

Calendula tablets with nicotinic acid. Med.prom. 10 no.4;19 0-0 '56.  
(NIM 10;2)

I. Oddel farmakologii Fizicheskogo nauchno-issledovatel'skogo insti-  
tuta lekarstvennykh i aromaticheskikh rasteniy.  
(CALENDULA) (NICOTINIC ACID)

NIKOL'SKAYA, B. S.

USSR/Pharmacology. Pharmacognosy. Toxicology - Medicinal Plants. T-5

Abstr Jour : Sborerat Zhur - Biologiya, No 16, 1957, 71727

Author : Bereshinskaya, V.V., Nikol'skaya, B.S.

Last :

Title : On the Pharmacology of *Maïsperrum dahuricum* Alkaloid.

Orig Pub : Farmakol. i toksikologiya, 1956, (1957), Aiden, St. Ref,  
13-14

Abstract : The study of Sinomenine (I; alkaloid from the *Maïsperrum dahuricum* grass) established DL<sub>50</sub> I for mice 131 mg/kg, and the minimal lethal dose of I for cats 75 mg/kg. Intravenous administration of I in 0.3-3 mg/kg doses into cats under urethane anesthesia produced lowering of blood pressure (BP) by 20-90 mm Hg in the course of 45-60 minutes. In acute tests with rabbits where doses of 20-40 mg/kg of I were used, the BP also dropped. I in a solution of 10<sup>-5</sup> - 10<sup>-4</sup> showed a positive inotropic effect on an isolated frog heart. The

Card 1/2

- 47 -

USSR/Pharmacology. Toxicology. Various Preparations V

Als Jour : Ref Zhur-Biol., No 8, 1958, 37643

Author : Turova A. D., Nikol'skaya B. S., Trutneva Ye. A.

Inst : Not given

Title : On the Pharmacology of Echinopsine, a New Alkaloid (K farmakologii novovo alkaloida ekhinopsina)

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No 3, 23-29

Abstract : Echinopsine (N-methyl--quinolin) (1) was isolated from the globe thistle Echinops ritro L. 1 when administered subcutaneously to mice in doses of 2.5 to 50 mg/kg produced an irritating effect in the animals; the administration of 1 in doses of 100 to 300 mg/kg was marked by a diminution of motor activity, manifestations of inhibition, spasms followed by a state of general depression. A dose of 600 mg/kg was fatal

Card 1/2

NIKOL'CHINA, E. S.

"On the Pharmacology of Menispermum dauricum"

Report presented at the 144th meeting of the Pharmacology and Toxicology Section  
of the Moscow Society of Physiologists, Biochemists and Pharmacologists, 26 Jan. 1958.

All-Union Institute of Medicinal and Aromatic Plants

(Farmakologija i Toksikologija, 21, no 6, Nov-Dec 58, p. 615)

~~NIKOL'SKAYA, N.S.~~

Material from experimental study on dahuricin. Farm. i toks.  
21 no.2128-31 Mr-Ap '58 (MIRA 11:6)

1. Otdel farmakologii (zav. - prof. A.D. Turova) Vsesoyuznogo  
nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticheskikh  
rastenii.

(ALKALOIDS,  
Menispermum dahuricum alkaloid dahuricin, pharmacol.  
(Rus))

XIMOL'SKAYA, B.

"Hoary erysimum." Farm. i toks, fl no. 3195 My-Je '58 (MIRA 11:7)  
(CHYSELICUM)  
(CARDIAC GLYCOSIDES)

NIKOL'SKAYA, B.S.

Pharmacology of the alkaloid sarracin. Farm.i toke. 23 no.3:264-  
268 My-Je '60. (MIRA 14:3)

1. Otdel farmakologii (zav. - prof. A.D.Turova) Vsesoyuznogo  
nauchno-issledovatel'skogo instituta lekarstvennykh i aromatiche-  
skikh rasteniy.

(ALKALOIDS)

NIKOL'SKAYA, E.S.; SHRETER, A.I.

Tincture of Cimicifuga dahurica. Med. prom. 15 no.9:47-48 S '61.  
(MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh  
i aromaticheskikh rasteniy.  
(DOGBANE—THERAPEUTIC USE)

VASIL'YEVA, N.N.; NIKOL'SKAYA, B.S.

Experimental study of the toxic and possibly carcinogenic effect  
of the alkaloid sarracine. Farm. i toks. 28 no.1:111-114 Ja.-F  
'65.  
(MTRA 18:12)

1. Otdel po izucheniyu kancerogenykh agentov Instituta eksperi-  
mental'noy i klinicheskoy onkologii AMN SSSR i laboratoriya narodnoy  
meditsiny Vsesoyuznogo nauchno-issledovatel'skogo instituta lekar-  
stvennykh i aromaticheskikh rasteniy, Moskva. Submitted November 26,  
1969.

L 36476-66 EWT(1) RO  
ACC NR: AP6027048

(N)

SOURCE CODE: UR/0390/66/029/001/0076/0079

AUTHOR: Mikhail'skaya, B. S.

ORG: Laboratory of National Medicine/headed by Candidate of Medical Sciences V. V. Barashinskaya, All-Union Scientific Research Institute of Medicinal and Aromatic Plants, Moscow (Laboratoriya narodnoy meditsiny Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticheskikh rasteniy)

TITLE: Pharmacology of sanguinarine, an anticholinesterase alkaloid

SOURCE: Farmakologiya i toksikologiya, v. 29, no. 1, 1966, 76-79

TOPIC TAGS: pharmacology, pharmacognosy, mouse, toxicity, nervous system drug, eat, blood pressure, drug effect

ABSTRACT: At the All-Union Scientific Research Institute of Medicinal and Aromatic Plants sanguinarine was isolated by B. K. Rostotskiy from the plants Corydalis Ledebouriana and Corydalis Severtzovii and used as the sulfate salt. The effect of sanguinarine on the cholinergic receptors and cholinesterase as well as on the smooth muscles and pupil of the eye indicated that it suppresses the activity of cholinesterase and increase the sensitivity of animals to acetylcholine. The alkaloid increases the tonus of smooth musculature of the intestine and the pregnant uterus of animals. Intravenous injection of sanguinarine to white mice in a dose of 6-12 mg/kg causes a depression of the respiratory activity of the animals; reactions for pain and sound irritants are fully retained in mice. Increasing the dosage to 25 mg/kg is toxic and

UDC: 615.787

Card 1/2

+9787-63 EPP(n)-2/BPA(s)-2/EWT(l)/EWT(m)/ENG(u)/?/EMP(b)/EMP(t)/EWA(h)  
PL-7/Pb/Pb/Pz-6 IJP(c) RDE/WM/JD/JG/AT UR/C363/65/001/002/0171/0172  
ACCESSION NR: AP5009362

AUTHORS: Mil'nikova, G. F.; Gulyev, T. N.; Yefimovskiy, I. V.; Kagirova, G. M. 55

TITLE: Conductivity of solid and molten indium triselenide 57

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 2, 1965, 13  
171-172

TOPIC TAGS: indium triselenide, conductivity, p-n-s equilibrium, semiconductor 21

ABSTRACT: The purpose of this work was to prove the existence of four modifications of indium triselenide, to obtain information on the electrical conductivity of its high temperature forms and to investigate the conductivity changes of fused indium triselenide as a function of temperature. Conductivity polytherms of indium triselenide are shown in fig. 1 of the Enclosure. The discontinuities on the conductivity curves are shown in fig. 1 of the Enclosure. The discontinuities on the conductivity curves are shown in fig. 1 of the Enclosure.

Cord 1/12

L 49787-65

ACCESSION NR: AP5009362

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakov  
(Institute of General and Inorganic Chemistry)

SUBMITTED: 20 Nov 64

ENCL: 01

SUB CODE: EN, IC

NO REF IDV: 003

OTHER: 006

Cord 2/9

VAN BIN-NAN' [Wang Ping-nan]; NIKOL'SKAYA, G.P.; LUZHNAIA, N.P.;  
YEVFIMOVSKIY, I.V.; BABITSYNA, A.A.

Study of the system copper - arsenic in the Cu<sub>2</sub>As compound  
region. Izv. AN SSSR. Neorg. mat. 1 no.9:1476-1483 S '65.  
(MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova  
AN SSSR.

L 15207-66 DWT(m)/T/SWP(t)/SWP(b) JWP(c) JL/JQ  
ACC NMK AP6001299 SOURCE CODE: UR/0363/65/001/008/1328/1334 45

AUTHOR: Luzhnaya, N. P.; Nikol'skaya, G. F.; Wang, Ping :an 44

ORG: Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR) B

TITLE: Semiconducting compounds of type  $\text{A}_3^{\text{I}}\text{B}^{\text{III}}\text{C}_2^{\text{V}}$

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1328-1334

TOPIC TAGS: copper compound, gold compound, arsenic compound, indium compound, gallium compound, antimony compound

ABSTRACT: An attempt was made to prepare the compounds  $\text{Cu}_3\text{B}^{\text{III}}\text{C}_2^{\text{V}}$  and  $\text{Au}_3\text{InC}_2^{\text{V}}$ , where  $\text{B}^{\text{III}}$  is indium or gallium, and  $\text{C}^{\text{V}}$  is arsenic or antimony, by fusing together the elements taken in stoichiometric proportions in evacuated ampoules with vibratory stirring. Phase diagrams of binary systems entering into the ternary system copper-gallium-arsenic were studied. To determine the interaction in alloys of the composition  $\text{Cu}_3\text{GaAs}_2$ , the section  $\text{GaAs}-\text{Cu}/\text{As} = 3:1$  of the Cu-Ga-As system was investigated, since, based on the phase diagrams of the binary systems,  $\text{Cu}_3\text{GaAs}_2$  should lie on this section. Alloys corresponding to the compositions  $\text{Cu}_3\text{GaAs}_2$ ,  $\text{Cu}_3\text{InAs}_2$ ,  $\text{Cu}_3\text{GaSb}_2$ , and  $\text{Cu}_3\text{InSb}_2$  did not consist of a single phase, i.e., ternary compounds of these compositions are not formed under the conditions studied. Thermographic and microstructural data also indicate that alloys of the

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L 15207-66  
ACC N# AP6001299

compositions  $Au_3InAs_2$  and  $Au_3InSb_2$  do not consist of a single phase either. Apparently, the criteria for predicting the existence of semiconducting compounds should be confined to the main subgroup of the first group of the periodic system in the case of compounds of type  $A_3B_{III}C_2V$ . Orig. art. has: 7 figures and 2 tables.

SUB CODE: 07,11 / SUBM DATE: 28Apr65 / ORIG REF: 004 / OTH REF: 0^3

TS  
Card 2/3

NIKOL'SKAYA, G.P., NIKITINA, V.E., TEFIMOVSKII, I.F., LOBANOVA, Yu.E.

Alloys of the system gold - antimony in the solid and liquid states. Izv. AN SSSR. Neorg. mat. 1 no. 10: 1826-1833 O '65.  
(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR. Submitted April 27, 1965.

ACC NR: AF6032953

SOURCE CODE: UR/0363/66/002/010/1676/1677

AUTHOR: Nikol'skaya, G. E.; Berger, L. I.; Yevfimovskiy, I. V.; Kagirova, G. N.; Shchukina, E. M.; Kovaleva, I. S.

ORG: Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences, SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Electric conductivity of CdSnAs<sub>2</sub> in solid and liquid states

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 10, 1966, 1876-1877

TOPIC TAGS: cadmium tin arsenide, arsenide electric conductivity, liquid arsenide viscosity, liquid arsenide conductivity, cadmium compound, tin compound, arsenide, electric conductivity test

ABSTRACT: Cadmium-tin arsenide CdSnAs, was synthesized by fusion of stoichiometric quantities of high-purity components. All the specimens had a single-phase structure. Heating and cooling curves indicated no structural changes, except for melting and solidification at 595 and 592±5°C, respectively. The conductivity of the compound undergoes a change from impurity-type to intrinsic (see Fig. 1). The shape of the conductivity-inverted temperature curve indicates that the compound remains semi-conductive, melts without decomposition, and maintains a close order in the liquid

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UDC: 546.48'811'191:537.311

ACC NR: AP6032953

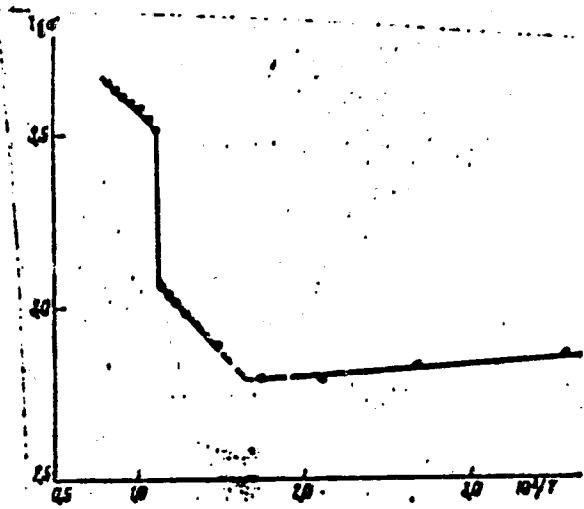


Fig. 1. CdSnAs<sub>2</sub> conductivity

state. The width of the forbidden-zone, calculated from the slope of the conductivity curve, amounts to 0.20 ev. Orig. art. has: 2 figures.

SUB CODE: 11/ SUBM DATE: 10Dec65/ ORIG REF: 008/ OTH REF: 003/

Card 2/2

NIKOL'SKAYA, G.M.

Hyaluronidase in the treatment of herpetic keratitis. Vest.  
eft. 76 no.5:28-31 S-O '63. (MIRA 17:1)

1. Kafedra glassykh bolezney (zav. - prof. N.A. Pletneva)  
II Moskovskogo meditsinskogo instituta imeni Pirogova.

USSR / Farm Animals. Cattle.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54755.

Author : Nikol'skaya, G. V.

Inst : Not given.

Title : Experience in the Directed Raising of Super-  
numerary Young Cattle in the Kolkhozes of the  
Molotov Oblast'.

Orig Pub: Tr. Molotovsk. s.-kh. in-t, 1957, 15, 244-251.

Abstract: The recommended rations for supernumerary  
calves when fed with milk, and in the after-  
weaning period, under conditions of the Molo-  
tov Oblast', are described.

Card 1/1

23

NIKOL'SKAYA, G.V., studentka

Clinical anatomical and histochemical characteristics of  
nodular periarteritis. Trudy 1-go MMi 22:131-139 '63  
(MIRA 18:2)

TIKHORENKO, T.I.; KUPTSOV, M.G., NIKOL'SKAYA, I.I.

Control device for column chromatography. Biokhimiia 25 no.2:376-  
(MIRA 14:5)  
379 Mr-Ap '60.

1. Laboratoriya biokhimii virusov Instituta radiatsionnoy i fiziko-  
khimicheskoy biologii Akademii nauk SSSR i laboratoriya biokhimii  
Instituta virusologii im. D.I.Ivanovskogo Akademii meditsinskikh  
nauk SSSR, Moskva.  
(CHROMATOGRAPHIC ANALYSIS)